IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : George William Celniker   Art Unit:
Serial No.: 09/019,465   Examiner:
Filed   : February 5, 1998
Title   : PERFORMING GEOSCIENCE INTERPRETATION WITH SIMULATED
            DATA

Assistant Commissioner for Patents
Washington, DC 20231

<u>INFORMATION DISCLOSURE STATEMENT</u>

Applicant submits the references listed on the attached

form PTO 1449, copies of which are enclosed.

This statement is being filed before the receipt of a

first office action on the merits.

Date of Deposit *August 25, 1998*

I hereby certify under 37 CFR 1.8(a) that this correspondence is being
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Howard J. Speight

Howard L. Speight

Respectfully submitted,

Date: _8/28/98_

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SUBSTITUTE FORM PTO-1449 (MODIFIED)	U.S. ,RTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 08470/007002	SERIAL NO. 09/019,465
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) (37 CFR 1.98(b))		APPLICANT George William Celniker	
		FILING DATE February 5, 1998	GROUP

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
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	AH						
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FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION YES	NO
	AL	PCT/US 97/24278	05/27/98	PCT				
	AM							
	AN							
	AO							
	AP							

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	AQ	Bode, T. et al. "First experiences with GEOSTORE, an information system for geologically defined geometries" IGIS '94: GEOGRAPHIC INFORMATION SYSTEMS, INTERNATIONAL WORKSHOP ON ADVANCED RESEARCH IN GEOGRAPHIC INFORMATION SYSTEMS. ISBN 3-540-58795-0, 1994, Berlin, Springer-Verlag, Germany, pp. 35-44, XP002064462
	AR	Jones, C.B. "Data structures for three-dimensional spatial information systems in geology," INTERNATIONAL JOURNAL OF GEOGRAPHICAL INFORMATION SYSTEMS, Jan-Mar 1989, UK, vol. 3, no. 1, ISSN 0269-3798, pp. 15-31, XP002064461
	AS	Raafat, Hazem M. "An extended relational database for remotely sensed image data management within GIS," IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol. 29, no. 4, July 1991, New York, pp. 651-655, XP000258538

EXAMINER	DATE CONSIDERED

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	4 3 4 0 9 3 4	07/20/82	Segesman	364	422	
	AB	4 6 7 9 1 7 4	07/07/87	Gelfand	367	73	
	AC	4 9 6 9 1 3 0	11/06/90	Wason et al.	367	73	
	AD	5 2 1 4 6 1 3	05/25/93	Esmersoy	367	31	
	AE	5 3 9 4 3 2 5	02/28/95	Schneider, Jr.	364	421	
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AL	0 299 862 A2	01/18/87	Europe				
	AM	GB 2300736 A	11/13/96	United Kingdom				
	AN	GB 2309562 A	07/30/97	United Kingdom				
	AO	PCT/US 97/24279	06/24/98	PCT				
	AP							

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	AQ	Jesperson, S.K., et al., "Modeling of Received Signals from Interfaces of Arbitrary Geometry", 1995 IEEE Ultrasonics Symposium, published July 11, 1995, pp. 1561-1565.
	AR	
	AS	

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	AA	4 9 2 2 2 5 4	05/01/90	Schuessler et al.	342	25	
	AB	5 3 5 5 0 8 8	10/11/94	Howard, Jr.	324	339	
	AC	5 5 5 3 4 9 2	09/10/96	Barrett et al.	73	152	
	AD	5 6 4 7 0 5 8	07/08/97	Agrawal et al.	395	601	
	AE	5 6 8 2 3 3 0	10/28/97	Seaman et al.	364	551	
	AF	4 8 2 1 2 1 4	04/11/89	Sederberg	364	522	
	AG						
	AH						
	AI						
	AJ						
	AK						

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	AL	WO 91/04544	04/04/91	PCT	15	72		
	AM							
	AN							
	AO							
	AP							

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	AQ	Benediktsson, J.A., et al., "Classification and Feature Extraction of AVIRIS Data", IEEE Transactions on Geoscience and Remote Sensing, Vol. 33, iss. 5, Sept. 1995, pp. 1194-1205.
	AR	Brown, P., "Collection and Quality Control of Marine Geological Data by the Ocean Drilling Program", Oceans '88: A Partnership of Marine Interests, 1988, pp. 1012-1017.
	AS	Duff, B.L., et al., "Applications of Object-Oriented Approaches to Expert Systems in the Earth Sciences", Developing and Managing Expert System Programs, 1991, pp. 160-165.

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	BI						
	BJ						
	BK						

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	BL							
	BM							
	BN							
	BO							
	BP							

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	BQ	Roelofs, L.H., et al., "Applying Semantic Data Modeling Techniques to Large Mass Storage System Designs", Mass Storage Systems, 1990 10th IEEE Symposium, 1990, pp. 65-76.
	BR	Starks, S.A., et al., "Navigating Large Databases Using a New High-Level Computer Language", Northcon/95 1995, pp. 49-54.
	BS	Young, J.A., et al., "A Computer-Aided Geological Interpretation System for Subsurface Imaging", Geoscience and Remote Sensing, 1994 Symposium, pp. 854-856.

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	CI						
	CJ						
	CK						

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							YES	NO
	CL							
	CM							
	CN							
	CO							
	CP							

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	CQ	Zhou, Guan-Xiong, et al., "An Expert System for Pattern Recognition Based on Features and Knowledge", Pattern Recognition, 1988 9th International Conference, 1988, pp. 1239-1241.
	CR	Mallet, J.L., "GOCAD: A Computer-aided Design Program for Geological Applications", June 1989, pp. 1-37.
	CS	Mallet, J.L., "Discrete Smooth Interpolation in Geometric Modelling", Computer-Aided Design, Vol. 24, No. 4, April 1992, pp. 177-192.

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Substitute Disclosure Form (PTO-1449)

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